IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

pplication of:

Daniel I. Kerpelman et al.

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For:

INTEGRATED INTERACTIVE

SERVICE TO A PLURALITY OF

MEDICAL DIAGNOSTIC

**SYSTEMS** 

GROUP 3600

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Examiner:

Morgan, Robert W.

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**Assistant Commissioner** for Patents Washington, D.C. 20231 CERTIFICATE OF MAILING 37 C.F.R. 1.8

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on the date below:

Date

Lynda Howell

AMENDMENT AND RESPONSE TO OFFICE ACTION MAILED MARCH 21, 2002 RECEIVED

JUN 0 4 2002

Technology Center 2100

Dear Sir:

This is in response to the Office Action mailed on March 21, 2002.

In the Office Action, claims 1-32 were rejected. Claims 1-32 are believed to be in condition for allowance. Reconsideration and allowance of all pending claims are requested.

Independent claims 1, 16 and 25 and dependent claims 2-15, 17-24 and 26-32 were rejected under 35 U.S. §103(a) as being unpatentable over Wong et al. (6,260,021) in view of Koritzinsky et al. (6,272,469). Al! pending claims are believed to be clearly patentable for the reasons summarized below.

The burden of establishing a prima facie case of obviousness falls on the Examiner. Ex parte Wolters and Kuypers, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a prima facie case, the Examiner must not only show that the combination includes all of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. Ex parte Clapp, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

# Claim 1 and The Claims Depending Therefrom

#### Claim 1 recites:

- 1. A method for providing service data to medical diagnostic systems, the method comprising the steps of:
  - (a) generating a diagnostic system service request for a designated diagnostic system coupled to an internal network of a medical diagnostic facility;
  - (b) transmitting the request to a remote service provider over an external network via a data communication control system coupled to a plurality of diagnostic systems over the internal network;
  - (c) receiving and processing the request at the remote service provider;

(d) transmitting a response from the remote service provider in response to the request.

As a preliminary matter, Applicants direct the Examiner to the Koritzinsky et al. reference, which is relevant to the rejections of all claims. The Koritzinsky et al. reference does not qualify as prior art against the above referenced application. In accordance with 35 U.S.C.§ 103(c) and Pub. L. 106-113, § 4807, enacted November 29, 1999, subject matter developed by another person which qualifies as prior art only under subsection (e) of 35 U.S.C.§ 102, shall not preclude patentability where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. Here, both the subject matter of the Koritzinsky et al. reference and the claimed invention were, at the time the invention was made, owned by the same assignee or subject to an obligation of assignment to the same assignee. Since the present application has a filing date after November 29, 1999 and the Koritzinsky et al. reference did not issue until after the filing date of the present application, it is clear that the Koritzinsky et al. reference does not qualify as prior art under 35 U.S.C.§ 102(e)/103(c). Without the Koritzinsky et al. reference, the Examiner's rejections of claims 1-32 are moot.

As discussed above, the Koritzinsky et al. reference does not qualify as prior art due to the obligation of common assignment at the time of the invention recited in the claims of the present application. However, Applicants have chosen to address the Examiner's comments regarding the Wong et al. reference in anticipation of any future obviousness rejection based on the Wong et al., either alone or in combination with another reference.

Among the elements not taught or suggested by Wong et al. are transmitting the request to a remote service provider over an external network via a data communications

control system, receiving and processing the request at the remote service provider, and transmitting a response from the remote service provider in response to the request.

The Examiner uses the Wong et al. reference to reject claim 1 by making some basic assumptions. The Examiner assumes that the internal network is depicted as item 36 in Figure 1 of the Wong et al. reference. Likewise, the Examiner relates a plurality of diagnostic systems coupled to the internal network to items referenced as number 38 in Figure 1 of the Wong et al. reference. The Examiner uses these assumptions from the Wong et al. reference as the basis of the rejection of claim 1. The Examiner admits, however, that Wong et al. does not disclose the claimed data communications control system coupled to a plurality of diagnostic systems, receiving and processing the request at the remote service provider; and transmitting a response from the remote service provider in response to the request.

In addition to the Examiner's admitted missing elements, the assumptions made by the Examiner are not supported by Wong et al., and even if correct, do not warrant the rejection. First, the Examiner assumes that the workstations of the Wong et al. reference can be considered medical diagnostic imaging systems by having the network of Wong et al. connect to the Internet. However, the network referred to by the Examiner is an internal network and cannot be interchanged as an external network. The Examiner's assumption fails because item 36 of Figure 1 in the Wong et al. reference is defined by the Examiner as an internal network. Likewise, the Wong et al. reference does not teach or suggest a medical diagnostic imaging system that transmits or receives requests or responses over an external network via a data communications control system. In fact, the Wong et al. reference teaches that the workstations should interface only with the Medical Image Server, and not that the "clients" are or could be medical diagnostic imaging systems. Moreover, the Examiner's assumption regarding the inclusion of a medical diagnostic imaging system as a client is inconsistent with the teaching and problem addressed by Wong et al. In particular, workstations 38 of Wong et al. access

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image data from the server 12 and, as such, are not medical diagnostic imaging systems (e.g. MRI, ultrasound, CT, X-ray) as that term is used in the claimed context.

In addition to the above arguments, the Examiner's assumption regarding the coupling of the Picture Archival Communication (PAC, item 26) and Radiology (RIS, item 18) systems to the internal network (Intranet item 36) is not supported in the Wong et al. reference. The RIS and PAC communicate image data with the CRIE and CIIE, which communicate to the Medical Image Server. Likewise, the Medical Image Server transmits image data to the workstations, but these are on the internal network as noted by the Examiner. The Wong et al. reference does not teach or suggest a medical diagnostic imaging system being coupled to the same internal network as the workstations. In fact, the Wong et al. reference teaches that the workstations should interface only with the Medical Image Server and that the medical diagnostic imaging systems (RIS and PAC) should interface separately with the Medical Image Server. The Examiner's assumption regarding the coupling of a medical diagnostic imaging system with the internal network is inconsistent with the teaching and problem addressed by Wong et al. The PAC and RIS are not communicating over the internal network, nor are they coupled to the internal network. Thus, the PAC and RIS are not coupled to the internal network as suggested by the Examiner. Accordingly, the Applicants respectfully request the Examiner to withdraw the rejection of claim 1 as based on the Wong et al. reference.

Furthermore, The Examiner admits that Wong et al. fails to teach or suggest a data communication control system, a remote service provider, or an external network. In addition to these items, the Wong et al. reference fails to suggest or teach a diagnostic system service request. In the Wong et al. reference, the data generated is image data. The mere mention of image data, as defined in Wong et al., does not teach or suggest the generating a diagnostic system service request. Thus, the Wong et al. reference fails to teach or suggest the step of generating a diagnostic service request.

## **Claim 16 and The Claims Depending Therefrom**

Claim 16 recites:

- 16. A method for servicing a plurality of medical diagnostic systems, the method comprising the steps of:
  - (a) generating a service request for designated diagnostic system of a plurality of diagnostic systems coupled to an internal network of a medical diagnostic facility;
  - (b) accessing system data useful in addressing the service request;
  - (c) transmitting the service request to a remote service provider via a data communications control system;
  - (d) processing the request at the remote service provider; and
  - (e) transmitting a service response from the remote service provider to the data communications control system.

As discussed above, the Koritzinsky et al. reference does not qualify as prior art due to the obligation of common assignment with the invention of the present application. However, Applicants have chosen to address the Examiner's comments regarding the Wong et al. reference in anticipation of any future obviousness rejection based on the Wong et al., either alone or in combination with another reference.

Among the elements of claim 16 not taught or suggested by Wong et al. are generating a service request for designated diagnostic system of a plurality of diagnostic systems coupled to an internal network of a medical diagnostic facility, accessing system data useful in addressing the service request, transmitting the service request to a remote service provider via a data communications control system, processing the request at the remote service provider, and transmitting a service response from the remote service provider to the data communications control system.

Again, the Examiner uses the Wong et al. reference to reject claim 16 by making some basic assumptions. The Examiner assumes that the internal network is depicted as item 36 in Figure 1 of the Wong et al. reference. Likewise, the Examiner relates a

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plurality of diagnostic systems coupled to the internal network to items referenced as numeral 38 in Figure 1 of the Wong et al. reference. Furthermore, the Examiner assumes that the Picture Archival Communications (PAC) and Radiology (RIS) systems process data and requests. The Examiner uses these assumptions from the Wong et al. reference as the basis of the rejection of claim 16. The Examiner does not use the Wong et al. reference for the claimed accessing system data useful in addressing the service request, transmitting the service request to a remote service provider via a data communications control system, processing the request at the remote service provider, and transmitting a service response from the remote service provider to the data communications control system.

The Examiner's rejection of claim 16 is unfounded because it fails to identify in Wong et al. all of the steps in the claim or even those argued as taught by Wong et al. and is not, therefore, supported by the reference. As discussed above, the Wong et al. reference fails to teach a designated diagnostic system coupled to an internal network of a medical diagnostic facility, and generating a service request. As discussed above, the network 36 is an internal network, and as described in the Wong et al. reference as connecting with client workstations. The Wong et al. reference does not teach or suggest a medical diagnostic imaging system being coupled to the same internal network. In fact, the Wong et al. reference teaches that the workstations should interface only with the Medical Image Server and that the medical diagnostic imaging systems (RIS and PAC) should interface with the Medical Image Server. The Examiner's assumption regarding the coupling of a medical diagnostic imaging system with the internal network is inconsistent with the teaching and problem addressed by Wong et al. Thus, the PAC and RIS systems would not be coupled to the internal network as defined by the Examiner in the Wong et al. reference. Moreover, the Wong et al. reference does not teach or suggest generating a service request. As discussed above, the Wong et al. reference is regarding the transmission of image data and fails to teach the generating of service data.

### **Claim 25 and The Claims Depending Therefrom**

Claim 25 recites:

- 25. A system for providing remote service to a plurality of networked medical diagnostic systems, the system comprising:
  - a plurality of medical diagnostic systems coupled to an internal network of a medical diagnostic facility, including designated diagnostic system;
  - a service request generating circuit for formulating a service request for addressing an operation of the designated diagnostic system; and
  - a data communications control system coupled to the internal network and to an external network for transmitting the service request to a remote service provider and for receiving a response to the request from the remote service provider.

As discussed above, the Koritzinsky et al. reference does not qualify as prior art due to the obligation of common assignment with the invention of the present application. However, Applicants have chosen to address the Examiner's comments regarding the Wong et al. reference in anticipation of any future obviousness rejection based on the Wong et al., either alone or in combination with another reference.

Among the elements of claim 25 not taught or suggested by Wong et al. are a plurality of medical diagnostic systems coupled to an internal network of a medical diagnostic facility, including designated diagnostic system, a service request generating circuit for formulating a service request for addressing an operation of the designated diagnostic system, and a data communications control system coupled to the internal network and to an external network for transmitting the service request to a remote service provider and for receiving a response to the request from the remote service provider.

The Examiner uses the Wong et al. reference to reject claim 25 by making some basic assumptions. The Examiner assumes that the internal network is depicted as item 36 in Figure 1 of the Wong et al. reference. Likewise, the Examiner relates a plurality of

diagnostic systems coupled to the internal network to items referenced as number 38 in Figure 1 of the Wong et al. reference. The Examiner uses these assumptions from the Wong et al. reference as the basis of the rejection of claim 25. The Examiner does not use Wong et al. for the claimed a plurality of medical diagnostic systems coupled to an internal network of a medical diagnostic facility, including designated diagnostic system, and a service request generating circuit for formulating a service request for addressing an operation of the designated diagnostic system.

The Examiner's rejection of claim 25 is unfounded because Wong et al. fails to teach even those elements in the claim as suggested by the Examiner and is not, therefore, supported by the reference. As discussed above, the service request is not taught or suggested in the Wong et al. reference. In addition, the Wong et al. reference fails to teach a data communication control system, an external network, a remote service provider, transmitting the service request to a remote service provider, and receiving a response to the request from a remote service provider. The Wong et al. reference fails to teach or suggest a data communication control system as admitted by the Examiner. Furthermore, with the internal network being item 36, no external network is suggested or taught in the Wong et al. reference. Likewise, with the client workstations being connected to the internal network, no remote service provider is suggested or taught in the Wong et al. reference.

Moreover, the Wong et al. reference fails to provide for transmitting client data to a remote service provider. As described in the Wong et al. reference, the Medical Image Server receives image data from the CIIE and CRIE. Likewise, the Medical Image Server transmits image data to the workstations, but these are on the internal network as noted by the Examiner. The Medical Image Server does not transmit image data to any system other than those workstations on that internal network. Thus, the Wong et al. reference fails to teach or suggest transmitting client data to a remote service provider. The internal network, as identified by the Examiner, cannot be both internal and external

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at the same time. Thus, the Wong et al. reference does not provide for any transmission between clients and a remote service provider. Likewise, the receiving of a response to the request from a remote service provider is not provided for in the Wong et al. reference.

### Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Date: 5/20/2002

Respectfully submitted,

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